

CDR Steve Vincent 31 March 2003





- Measures
  - Measures to drive management action
- Data
  - Accurate data in a format for analysis
- Software
  - Tool to analyze data and present information



#### What we measure for CN

- Measu | Pres | Data | Softwar
- Number of personnel (Current on Board or COB)
  - Manning Readiness numbers derived from this information
- Number assessed (Recruiting Numbers)
- Manning Gains and Losses
- Retention, Reenlistment and Attrition
- Spending
  - Strength Related and Non-Strength Related Spending
  - Incentive Programs
  - Permanent Change of Station (PCS) moves and spending
  - Other measures for Enlisted and Officer Community Managers

#### Measurement to Scorecardata

- Measu res a roata Softwar
- Have significant information for the measures on the previous slide, but it is not in a form for management action
  - Much of the information is historical performance with little forecasting information
  - Many of the measures are items that CNP has little control over
  - Information not readily available for analysis
  - Significant detail, but little analysis for action



## Framework to Move Forward



- Currently working on producing Scorecard to allow management action.
- Some general items that will be included:
  - Manning measures with forecasts of future manning
  - Recruiting measures
  - Retention measures
  - Financial measures



#### Data Issues

- Using the just four general items given on the last slide, there are current issues with data availability and accuracy.
  - Most of the data are "pulls" from disparate mainframe sources
  - Data is stored is separately in different levels of detail
    - Enlisted Manning Data is stored in EPMAC Data Warehouse
    - Retention Data is stored in PersMart and accessed through RMS
    - Much of the information is not stored in a data base at all
  - There is no consistent framework for "pulling" the information from the mainframe sources





# Developments to Improve Wewar Data Availability &

- AFPMACand N13 incorporating Enlisting and Officer manning information in an Oracle Data Warehouse
- N10 investigating using NSIPS with Business Objects to report financial data
- CIO/PERS7 investigating using NSIPS and PersMart information in a PeopleSoft application



### Scorecard Software

- There are many flavors of Balanced Scorecard Software with varying capabilities.
- Common attributes of this software:
  - Color indication of performance (Stop-Light)
  - Ability to "drill-down" from the high-level to detailed level
  - Graphical indication of trends
- Without going into relative strengths and weaknesses of the software packages, the following slides will show the characteristics needed by CNP

### Delivery Method

Measur es Data Softwa re

- Many of the products work in a client-server mode with a client application installed on the individual workstation.
- This does not work for CNP for many reasons:
  - Difficult to get software onto many geographically distributed computers
  - Difficult to get NMCI certification of Software
  - Difficult in NMCI environment to get updated software onto computers
- For these reasons, a web-based application is needed to eliminate the needed for software on individual machines

## Update of Structure

Measur es Data **Softwa** re

- In almost all Scorecard products, the data is pulled into the product for analysis and display.
- The software organizes this data using a some sort of structure. For CNP, this includes various measures and some sort of location structure as shown in the diagram on the next slide.
- Since this structure is not constant, frequent updates are necessary. Need query driven update of structure to minimize manual updates.



## **Display Limits**

- The reporting of information in many of these tools is limited to the format delivered by the product.
- It is difficult to export this information to other software such as PowerPoint or Excel.
- Many of these presentation forms work well only on the individual computer and not in the presentation or report mode.
- Need to have flexibility to show information in many modes and have ability to export information.



#### Number of Dimensions

- When examining, personnel data, it may be necessary to examine this information using the following dimensions:
  - Location (Ship, Battlegroup, Fleet, or Type)
  - Specialization (Designator or Rate)
  - Rank
  - Others such as Enlisted Zone or multiple types of locations
- Since it is not known how many ways it may be necessary to "slice and dice" the data, as many as five or more dimensions may be necessary.





- A typical month of manning data can include as much as 100,000 records.
- It is necessary for the software to condense this information to a level for management action.
- It is also necessary for the software to show multiple months.
- For this reason, any scorecard software needs the capability to handle an extremely large data base





## Data Analysis Tools

- The scorecard presentation cannot include just numbers and a color indication.
- Additional information such as trends, statistical analysis and other mathematical relations are needed to derive the scorecard.
- Also need these tools for any analyst that could be looking at the same data.
- Must have means to do mathematical and statistical analysis of data.



## Security

- With multiple users accessing the tool from multiple sites, need good security protocols to ensure that only authorized users access scorecard
  - Information in scorecard may not be classified, but it is Official Use Only
- In addition:
  - Some users can update date while others can only look
  - Some users need only to see part of the scorecard
- Need to have flexible security to provide security and varying access.

